What is jaundice? Jaundice [JAWN-dis] is a term used to describe a yellow color in a baby’s skin and in the white parts of the eyes. Jaundice sometimes appears when there is a high level of a substance called bilirubin [BIL-ee-roo-bin] in the baby’s blood that causes the yellow color. A high level of bilirubin is called hyperbilirubinemia (hyper = too high, bilirubinemia = bilirubin in the blood). Jaundice can occur in any newborn, but premature babies have a higher risk of developing jaundice. Up to 50 percent of all newborns have some degree of jaundice, but it can last longer and can be more severe in premature babies.

Bilirubin is a waste product formed when red blood cells die. Red blood cells carry oxygen throughout the body. In newborns, red blood cells last about 100 days on average. The death and reformation of red blood cells is a natural process that goes on continuously. The bilirubin is passed through the liver and removed from the body in the stool and urine. Too much bilirubin in the body can lead to a type of brain damage called kernicterus [ker-NIK-te-res]. Although kernicterus is very rare, it can lead to severe problems with speech, hearing or movement (called cerebral palsy). The goal of recognizing and treating jaundice in newborns at an early stage is to eliminate any possibility of kernicterus.

What are the signs and risk factors of jaundice? The two main criteria for jaundice are 1) yellow skin color, and 2) high levels of bilirubin in the blood. Bilirubin levels are measured with a blood test or with a device that uses a light beam that is shined through the baby’s skin. Infants with light skin may have a yellowish color to the skin or in the white portion of their eyes. Doctors look at these signs along with the risk factors below to decide how to treat the jaundice:

- baby was born before 38 weeks
- baby is breastfed only
- baby has bruising of the head or skin
- baby has a different blood type than the mother
- baby has a disease passed through the family — a genetic condition — that increases the risk for jaundice

Babies born early can have a higher risk for jaundice. In the womb, the mother’s body removes bilirubin from the baby’s bloodstream through the placenta. At birth, the baby’s body must adjust quickly to doing this on his or her own. This process is slowed for premature babies whose body organs (mainly the liver) are not yet fully mature and do not yet have full function. The risk for jaundice also increases because premature babies often are not able to feed enough. If the baby feeds less, then the stools are reduced, which can cause bilirubin to be reabsorbed in the intestine and build up in the bloodstream. The risk is also increased if there is a build-up of bilirubin due to infection or some diseases that may be present at birth, which may affect the liver.
What can be done for jaundice? In the NICU, babies are monitored for jaundice so it can be treated. The type of treatment given depends on the degree of jaundice. Treatment may include placing the baby under a special light (called phototherapy). The light shines through the baby’s skin and increases the rate at which bilirubin can be removed from the body. The baby’s eyes must be covered while under this light. This treatment may last for several days.

For severe jaundice, doctors will want to reduce the level of bilirubin in the baby’s blood quickly. This is done by replacing the baby’s blood with blood from a donor (called an exchange transfusion). Your NICU team can tell you more about this treatment and what is involved. If the infant’s jaundice is caused by other problems (such as a disease passed through the family), treatment for the disease may be needed.

What can parents do? Learn about the signs and risk factors of jaundice and what to do if you think your baby has jaundice. Before you and your baby leave the NICU, talk with your baby’s doctors and nurses to be sure you have answers to these questions:

✔ What tests for jaundice have been done? ________________________________

✔ What is my baby's risk for jaundice and what should I do if I see signs such as an increased yellowish color of the skin and in the whites of my baby's eyes? ________________________________

✔ After leaving the NICU, when should I have my baby checked for jaundice? ________________________________

Breastfeeding and jaundice. Infants who breastfeed may be more likely to have jaundice in the first few days after birth. This is called breastfeeding jaundice and is due mainly to the infant not being able to feed well at the breast or due to a mother not yet producing enough breast milk. Breast milk is known to be very helpful for babies, but breastfeeding can sometimes be a challenge for mothers and premature babies. Your neonatal intensive care unit (NICU) team will help you with breastfeeding questions while you and your baby are in the NICU.*

If my baby had jaundice while in the NICU, can he or she have it again? Yes. For babies born early, the bilirubin level along with the baby’s week of birth (called the gestational age) gives doctors a good picture of your baby’s risk for having jaundice after you leave the NICU. In some cases, infants still need treatment for jaundice after leaving the hospital. If your baby will need therapy for jaundice, the questions in the box below can help you prepare.

Questions to ask if my baby needs light treatment at home

• Who will show me how to use the phototherapy light?
• Will a home health nurse visit to check my baby?
• How often should I take my baby to the doctor for checkups?

Find out more: these websites may be helpful

American Academy of Pediatrics
www.aap.org/parents

Health on the Net Foundation
www.hon.ch

Healthy Steps for Young Children
www.healthysteps.org

International Lactation Consultant Association
www.ilca.org

National Institute of Child Health and Human Development
www.nichd.nih.gov/health/education

NICHD Cochrane Neonatal Review Group
www.nichd.nih.gov/cochrane

Neonatology on the Web
www.neonatology.org

Medline Plus®
www.nlm.nih.gov/medlineplus

Sidelines National Support Network
www.sidelines.org

U.S. Department of Health & Human Services
www.healthfinder.gov